

Lesson 2-7

Reinforce Understanding

Divide Decimals Using an Algorithm

I can divide with decimals by making the divisor a whole number first.

Worked model

A ribbon 82.2 meters long is cut into 4 equal pieces. How long is each piece?

1. Write 82.2 inside the bracket with 4 outside. The divisor is already a whole number.
2. Put the quotient's decimal point straight above the point in 82.2, then start dividing.
3. Divide, multiply, subtract, bring down — one place-value column at a time.
4. An amount is still left over, so annex a zero to 82.2 and keep dividing.

Answer: Each piece is 20.55 meters long.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. Rewrite each problem by making the divisor a whole number, then solve.

Complete the table. Show how you found each value.

Original	Multiply Both By	New Problem	Quotient
$4.5 \div 0.9$	10		
$3.6 \div 0.4$	10		

Show your work

2. What is $14.4 \div 1.2$?

Circle the letter of the best answer. Show how you know.

- A. 0.12
- B. 1.2
- C. 12
- D. 120

Show your work

3. What is $3.78 \div 0.6$?

Circle the letter of the best answer. Show how you know.

- A. 0.063
- B. 0.63
- C. 6.3
- D. 63

Show your work
